Federal Utility Partnership Working Group Meeting May 5-6, 2009 Biloxi, Mississippi

Hosted by: Mississippi Power

INTRODUCTION

The Federal Utility Partnership Working Group (FUPWG) is a joint effort between the Federal Energy Management Program (FEMP) and the utility industry to stimulate the exchange of information among participants and foster energy efficiency projects in Federal facilities nationwide. Over 140 individuals attended the meeting.

Attendance Representation:

- 40 utility officials
- 40 Federal agency representatives
- 6 National Laboratory representatives
- 52 representatives from energy-related organizations

(See Appendix 1 for full list of participants and organizations at the end of this report)

MEETING PRESENTATIONS

Meeting presentations can be found at http://www1.eere.energy.gov/femp/financing/uescs spring09 agenda.html

APPENDICES AT BOTTOM OF THIS REPORT

Appendix 1: Meeting Participants List

AGENDA

Mississippi Power Company Welcome FEMP Welcome and Washington Update

- Economic Recovery Act
- EISA Guidance
- UESC Report

Naval Construction Battalion Center Gulfport /MPC Utilities Hardening Project

Energy Security Status

Smart Grid

Energy Surety and Renewable Energy Approaches and Applications

USAF and Army UESC Guidance

Top 10 Water Technologies

UESC Enabling Documents

Financing - Limited Lending Issues. Discussion with Lenders

Lawyers and Contracting Officer Update

- Retaining incentives and rebates
- New DOD guidelines on DOD Financial Management Regulation on Identification, Retention and use of Energy and Water Conservation Savings

Developing Renewable Projects at Federal Sites

- Renewable Project Overview
- NASA/FPL Case Study
- Competitive Agreements through DESC

Energy Lawyer and Contracting Officers Working Group

- Discussion on Civilian Side Rebates and Incentives Guidance Draft
- Developing a Model Power Purchase Agreement

All presentations from the FUPWG Biloxi meeting are available on the FEMP website at: http://www1.eere.energy.gov/femp/financing/uescs_spring09_agenda.html

DAY 1 - TUESDAY, JUNE 5, 2009

WELCOMING REMARKS

Don Horsley, Mississippi Power

Don Horsley, Vice President of Customer Services & Retail Marketing for Missippi Power welcomed attendees to the meeting. After the devastation of Hurricane Katrina, Southern Company and the community as a whole has rededicated itself to building a more resilient community. The military uses three billion kilowatt hours per year in Southern Company service territory, and the company wants to ensure the military meets all its goals. Mr. Horsley provided details on how partnerships function, offering information regarding Southern Company's partnership with the military. His closing comments included commentary on the meeting's agenda items; such as meeting the requirements of EISA (Energy Independence and Security Act), the American Recovery and Reinvestment Act (ARRA, a.k.a. The Recovery Act), making the electricity grid smarter and the transmission and distribution system more secure.

FEMP WELCOME AND WASHINGTON UPDATE

David McAndrew, Chair of the Federal Utility Partnership Working Group, FEMP, Department of Energy

David McAndrew, FEMP's Project Lead for Utility Energy Service Contracts (UESC) and state energy efficiency incentive programs, provided a FEMP activity update focusing on four major areas:

- Changes to the FEMP organization, structure, and services
- FEMP EISA 432 Guidance
- ARRA update
- Utility spending

FEMP has been restructured to encompass three divisions:

- Project Transaction Service helps agencies implement projects
- Applied Technology Services technical assistance

Decision Support Services- strategic planning services

FEMP will continue with its key duties. FEMP staff will now also serve as customer service agents, offering technical guidance and assistance to various Federal agency offices. Each FEMP staff member has been assigned to a Federal agency, serving as their primary point of contact.

Mr. McAndrew spoke about new guidance for Section 432 of EISA, which was issued on November 25, 2008. Section 432 has a number of new requirements, including:

- Completing an annual energy and water evaluation for 25% of an agency's owned, operated, or leased covered buildings.
- Covered buildings must represent 75% of total facility energy use.
 - Buildings included in EISA's 3% energy efficiency goal won't necessarily align with the definition of "covered building".
- Building information will be uploaded into a public web-based tracking tool.
- Each facility must have a designated Facility Energy Manager.

More detailed information can be found at: http://www1.eere.energy.gov/femp/pdfs/eisa_s432_guidelines.pdf

Mr. McAndrew provided an update on the Recovery Act. The total funding package is \$787 billion, with up to \$17.3 billion earmarked for federal construction and operations and maintenance (O&M). At least \$4.7 billion has been aimed at increasing EERE's efforts to work on federal facilities.

The Office of Management and Budget's (OMB) Recovery Act guidance requires a description detailing how each agency will meet energy efficiency and green building requirements. The guidance incorporates EPACT 2005 and EO 13423 requirements, which encompasses, in part, energy efficient buildings and sustainable design and construction. Nothing in the Recovery Act or related OMB guidance prohibits the use of a UESC, and thus should be considered as an option.

The Office of Management and Budget's (OMB) Recovery Act guidance can be found at: http://www.recovery.gov/?q=node/317

FEMP issued a call to all agencies to competitively request FEMP for project implementation technical assistance. FEMP Services include design and proposal review, strategic energy planning, technology assessments, and much more. Also, FEMP has additional funding to support UESCs and PPAs.

Finally, an update was provided on the utility sector. Utility spending on electric and gas energy efficiency projects has been rising 15-20% per year for the past three years. With a number of new funding sources coming online, spending is projected to almost double between 2008 and 2015.

To view Mr. McAndrew's presentation, please visit:

http://www1.eere.energy.gov/femp/pdfs/fupwg_spring09_mcandrew.pdf

NAVAL CONSTRUCTION BATTALION CENTER GULFPORT /MPC UTILITIES HARDENING PROJECT

Joe Bosco and Paul M. Harrison, Mississippi Power

Joe Bosco, Account Executive with Mississippi Power (MS Power), gave a presentation on a MS Power project at the Naval Construction Battalion Center (NCBC), a 1,100 acre facility which spends \$3 million a year on electricity. After Hurricane Katrina, MS Power was awarded the project in April 2007 under a GSA Areawide Contract - Exhibit A, for the purposes of:

- Converting 30-40% of overhead utilities to underground
- Improving electric and communication lines
- Performing a distribution study

The project was funded for \$16 million, and is estimated to run from April 2007 to July 2009. It will convert NCBC's electric distribution system so that it is compatible with MS Power's, improving overall restoration response time and reliability.

To view Mr. Bosco and Mr. Harrison's presentation, please visit: http://www1.eere.energy.gov/femp/pdfs/fupwg_spring09_bosco_harrison.pdf

ENERGY SECURITY STATUS

Karen White, U.S. Air Force - Facility Energy Center on behalf of Mr. Mike Aimone with input from Brian Lally, Utilities Privatization Director for the Deputy Under Secretary of Defense for Installations and Environment.

Karen White, Staff Attorney with the U.S. Air Force Facility Energy Center, provided an overview on energy security initiatives around the U.S. Ms. White defined energy security as the right power at the right time to do the mission, with budgetary implications as well.

Ms. White provided examples of several energy security projects and highlighted the Net Zero Energy Initiative at Vandenberg Air Force Base in California. Energy managers are testing an energy security framework for installations to inform right size loading and generation at the Air Force Base. Another of Ms. White's examples included a reference to the war game on energy security, currently being coordinated by the National Defense University.

To view Ms. White's presentation, please visit: http://www1.eere.energy.gov/femp/pdfs/fupwg_spring09_white_1.pdf

SMART GRID

Katherine Hamilton, Gridwise Alliance

Katherine Hamilton, President of Gridwide Alliance provided an overview on smartgrid and Gridwise Alliance's efforts. Gridwise Alliance was formed in September 2003 and currently consists of 83 energy and electricity company stakeholders. The alliance is committed to increasing knowledge among industry stakeholders, promoting an understanding of roles, benefits, costs, and supporting RD&D initiatives and public-private partnerships.

Smartgrid provides two way communication and control, and data flow. It allows the demand side of electricity to impact the supply side, which can help to maintain accurate sizing of the system. Gridwide Alliance has a number of working groups focused on the following: legislation and policy (at both the federal and state levels), implementation, and cyber security. Smartgrid also works on several key policy initiatives, including responding to the FERC smart grid docket and participating in NIST standards process.

To view Ms. Hamilton's presentation, please visit: http://www1.eere.energy.gov/femp/pdfs/fupwg_spring09_hamilton.pdf

ENERGY SURETY AND RENEWABLE ENERGY APPROACHES AND APPLICATIONS

Mike Tower, Sandia National Laboratory

Mike Hightower, with the Energy Systems Analysis Department at Sandia National Laboratories addressed some of the safety concerns at forefront of implementing newer technologies. He defines *energy surety* as *security, safety and reliability.*

His presentation addressed:

- Common energy infrastructure protection, reliability challenges, and pitfalls
- Energy risk assessment and management framework
- Energy surety concepts and processes
 - Optimizing system designs and operations to achieve energy safety, security, reliability, and cost-effectiveness
 - o An example of a military electric power reliability and security project

Mr. Hightower's presentation addressed how it is not possible to physically guard all energy infrastructure. In the past installations have made their systems redundant, which has lead to a false sense of security. Similarly, extensive storage on the generation side can lead to security risks.

Common Electric Power Security and Reliability Concerns

- The current practice of providing power security often relies on back-up generators
- Supply redundancy is often not effective
- Current practices do not factor in the erosion of critical mission capability for extended outages

An Energy Surety Approach involves distributed generation and storage, so that electric power can be provided when the grid is down. Mission critical needs may be a fraction of overall use; Mr. Hightower recommended storage and generation on load side size, to match electric power performance needs. Sandia Lab works with sites to identify what is the acceptable risk on a site-specific level, and then works with sites to reduce risk to a level that the system is protected so that performance goals can always be met. Sites must prioritize critical energy demands for critical missions needs.

Mr. Hightower mentioned that a major challenge is building an electric grid incorporating extensive distributed generation, which will require more complex system control and integration to ensure energy safety, security, and reliability. Sites must decide what is appropriate for their situation and mission.

To view Mr. Hightower's presentation, please visit: http://www1.eere.energy.gov/femp/pdfs/fupwg_spring09_hightower.pdf

AIR FORCE AND ARMY UESC GUIDANCE

Jim Snook, U.S. Air Force, and Randy Smidt, Energy and Utilities Branch, U.S. Army

Jim Snook, Utility Acquisition Manager, U.S. Air Force, and Randy Smidt, Staff Engineer, Energy and Utilities Branch, U.S. Army spoke about their respective services' Utility Energy Service Contract (UESC) approval process, requirements and general guidelines.

Mr. Snook outlined the Air Force's approval process. An October 2007 memo detailed the process for both ESPC and UESC approval. It includes approval from the installation, the MAJCOM Energy Office, Air Force Civil Engineer Support Agency, and Headquarters. For financed UESCs, an approval package must include:

- Confirmation that no other funds are available
- Upfront investment and cost over time
- Expected finance rates
- Details for each Energy Conservation Measure (ECM), including demonstrating cost avoidance

A payback of less than ten years is no longer required. Instead, a project must just "demonstrate an economic return on investment".

Mr. Smidt gave an overview of the Army UESC program and of its draft policy guidance. The Army has completed 241 UESCs at over 30 installations, since the early 1990s, totaling \$327 million invested, with \$40 million in savings. This is equal to appropriated investments through the energy conservation investment program, and is a quarter to a half of what the Army invests in ESPCs, depending on the year.

In the summer of 2009, the Army will release a draft "Department of the Army Policy Guidance for Implementation of a Utility Energy Services Contract". Project facilitators are not required, but are encouraged for UESCs. Mr. Smidt outlined the necessary procedures, including contract methods, measurement and verification options, operations and maintenance, implementing a fuel-neutral approach, and the importance of partnering and bundling projects. Mr. Smidt also outlined the project concept, approach, and steps necessary for the implementation of this process.

Three case studies were discussed illustrating three different approaches to UESCs:

- Fort Knox –The first project started in 1996, and has since completed \$117 million in investments through 91 task orders. One third of all UESC work has occurred in the Army. These projects were completed through Basic Ordering Agreements (BOAs).
- Fort Lewis Recently awarded large project for \$40 million. \$18 million of which is financed and \$23.3 million s rebates through BPA through an interagency agreement.
- Fort McPherson \$3.7M project through Georgia Power though Master Agreement

All Army UESCs must occur within a ten year term (due to utility service authority and not the project's payback). Lastly, under EISA, all energy projects, whether financed or not, require M&V.

To view Mr. Snook's presentation, please visit: http://www1.eere.energy.gov/femp/pdfs/fupwg_spring09_snook.pdf

To view Mr. Smidt's presentation, please visit: http://www1.eere.energy.gov/femp/pdfs/fupwg_spring09_smidt.pdf

TOP 10 WATER TECHNOLOGIES

Francis Wheeler, Water Management Inc., and Phill Consiglio, Southern California Edison

Francis Wheeler, from Water Management Inc., and Phill Consiglio, Manager, Southern California Edison, spoke about their experiences with water technologies and methodologies to maximize efficiency.

Mr. Wheeler provided a list of water "Do's" and "Don'ts", which included the following:

DO:

- DO utilize intelligent irrigation systems –know your system and soil needs
- DO maintenance semi annually on your irrigation system, controls and distribution
- DO let nature provide resources. Catch the rain for irrigation, HVAC, and other processes
- DO reuse condensate water
- DO improve process water uses. Ask the question do we really need potable water for this application.
- DO educate kitchen and maintenance staff
- DO plumbing retrofits
- DO measure & Verify
- DO take advantage of water conservation rebates
- DO consider hiring a professional

DON'T:

- DON'T irrigate during or 12 hours before or after a rain event. Predictive technologies can prevent this.
- DON'T allow your irrigation systems to go without maintenance
- DON'T waste nature's free/provided resources capture and use rainwater.
- DON'T utilize bleeding edge technology that is not proven and/or that is a life cycle cost loser
- DON'T over do it on plumbing retrofits. Figure out how much water you need for a particular task.
- DON'T forget to do a water balance. Know where it is going. Measure it.
- DON'T forget to review billing
- DON'T assume staff will conserve –training is key
- DON'T forget to address distribution losses

Phill Consiglio's presentation focused upon partnering opportunities in an effort to save water. He outlined the energy cost of water, water technologies, and what actions have taken place at Naval Air Weapons Station China Lake to conserve water.

At \$0.10/kWh, water costs between \$100.00 to \$2,010 per MG (million gallons), which is a huge range. It is difficult to determine what water really costs. Water technologies can improve efficiencies. Mr. Consiglio provided the example of China Lake, which is in the desert. Improper irrigation (watering too much and at the wrong times) was wasting a large amount of water. After performing water audits, water conservation projects on the base have focused on irrigation and pumping efficiencies. Southern California Edison put controls on the irrigation system, lowered the level of the lawn, and replaced old inefficient well pumps.

To view Mr. Wheeler's presentation, please visit: http://www1.eere.energy.gov/femp/pdfs/fupwg_spring09_wheeler.pdf

To view Mr. Consiglio's presentation, please visit: http://www1.eere.energy.gov/femp/pdfs/fupwg_spring09_consiglio.pdf

DAY 2 - WEDNESDAY, JUNE 6, 2009

UESC ENABLING DOCUMENTS

Karen Thomas, National Renewable Energy Laboratory (NREL)

Karen Thomas, with NREL announced and distributed a May 2009 update to the UESC Enabling Documents. The purpose of the Enabling Documents is to help federal agencies and utilities move forward with UESCs, and to illustrate how agencies possess the authority to complete UESCs.

Ms. Thomas detailed the relevant legislation that permits UESCs, including EISA, National Defense Authorization Act of 2007, FAR Part 41, EO 13423, and more. She presented the various legal opinions supporting UESCs, as well as agency guidance. Ms. Thomas also listed the available contract models, as well as resources and contacts.

To view Ms. Thomas's presentation, please visit: http://www1.eere.energy.gov/femp/pdfs/fupwg_spring09_thomas.pdf

FINANCING: LIMITED LENDING ISSUES - DISCUSSIONS WITH LENDERS

Peter Flynn, Bostonia Partners, Bruce Gross, Dominion Federal and Jeffrey Stott, Guggenheim and Scott Foster, Hannon Armstrong Capital

Four representatives from financing companies provided their insights on the state of the market, and then took questions from the audience.

Peter Flynn from Bostonia Partners LLC spoke about market disruption and the impact it would have upon UESCs. Lenders are no longer willing to take speculative risks; they are looking for higher yields, leading to widening spreads. Mr. Flynn thinks the spreads will compress in 2009-2010. The market is generally good for UESCs and ESPCs, however both financial instruments have strong track records without defaults. UESCs are a partnership with investment grade utilities, and the U.S. government has the strongest credit in the world, so the investment is pretty secure.

With U.S. Treasury rates increasing, Mr. Flynn government will continue to absorb the excess supply, so as to keep the Treasury rates down (and keep borrowing costs low). He also discussed why finance rates are currently higher; due in part to a significant widening of credit spreads since 2007. Mr. Flynn expects that these spreads will

continue to level out in 2009. He noted that agencies should not currently expect much flexibility in contract terms.

Bruce Gross from Dominion Federal spoke about the UESC financing contractual structure, providing an explanation regarding the documents and the relationship of cash flows between parties. The parties are defined as *the utility, the government agency, the financier, and the trustee (bank).* Assignment of claims means that payments are made to a bank, instead of directly to a utility. The bank acts as a trustee. Once the construction is complete, the government sends payments to the trustee, and in turn, the trustee sends the debt payments (excluding M&V or O&M) to the financier.

Jeffrey Stott from Guggenheim spoke about the associated risks of UESCs to both utilities and investors. The risks to the utility should be analyzed both during the construction period and during the permanent period. The key legal document is "Sale and Assignment Agreement", which delineates the "assignment" of the payment stream from the government to the lender. Other risks to the utility can occur in the construction period, such as cost overruns. These risks can be mitigated through surety bonds.

The risks to the investor should also be analyzed during the construction period and during the permanent period. During construction, the focus is on the ability of the utility to deliver the project it has promised. Permanent term risks are very minimal. There is the potential for termination for convenience, which is more possible now with stimulus money coming in. Usually there is a fee associated with this, which is around 5%.

Scott Foster from Hannon Armstrong Capital, discussed options for obtaining the lowest interest rates. Bundling projects with more ECMs may be more economical. Additionally, by ensuring that the government contract has desirable termination and non-appropriation language, a project's price can be reduced. Interest rates are fixed when the Task Order is awarded. Mr. Foster cautioned to wait until one is ready to sign before locking into a rate. It is best to do this near or at the time of award. If a site wants a savings guarantee this will add a cost, and require entering into an O&M contract.

To view these four presentations in one document, please visit: http://www1.eere.energy.gov/femp/pdfs/fupwg_spring09_financing.pdf

UPDATE ON LAWYER SESSION: RETAINING INCENTIVES AND REBATES

Julia Kelley, Oak Ridge National Laboratory

Julia Kelley, from Oak Ridge National Laboratory, coordinates the Energy Lawyers and Contracting Officers working group, which convenes at events such as FUPWG and GovEnergy. Ms. Kelley provided an update to the group's most recent meeting in November 2008, at the Williamsburg, Virginia FUPWG meeting.

Since the November 2008 meeting, a draft guidance on retention and use of rebates and incentives by agencies has been prepared. It is designed for civilian agencies, sites authorities, and presents legal opinions. Karen White from the Air Force had reviewed this document, and the working group will scrutinize the document this afternoon. Once finalized, it will be posted to the FEMP website.

A working group of federal agency representatives have submitted draft technical comments to congressional staffers requesting the following legislative "fixes":

- Provide authority for alternative financing in buildings not federally owned but for which a federal agency pays the utilities. Projects should be paid for and be completed before the expiration of the lease.
- Broaden the definition of "renewables" to include thermal energy, such as geothermal heat pumps.
- Include the sale of excess energy to Federal users in the definition of energy savings. The current legislation stipulates "renewable electricity". The working group wants the term to be broadened to "renewable energy".
- Allow Power Purchase agreements for terms up to 25 years
- Incentivize the production of renewable energy

To view Ms. Kelley's presentation, please visit: http://www1.eere.energy.gov/femp/pdfs/fupwg_spring09_kelley.pdf

NEW DEPARTMENT OF DEFENSE (DOD) GUIDELINES FOR DOD FINANCIAL MANAGEMENT REGULATION "IDENTIFICATION, RETENTION, AND USE OF ENERGY AND WATER CONSERVATION SAVINGS"

Karen White, Air Force Civil Engineer Support Agency

New DOD guidelines on identification, retention, and use of energy and water conservation savings have been released since the last FUPWG meeting in November 2008. These financial management regulation guidelines came out in December 2008, and apply only to the DOD.

The financial management regulation has been amended so that there is now an additional option besides obtaining a utility credit. Statutory authority for DOD can be found in 10 USC 2913(b). 10 USC 2912 (c) essentially states that the federal site can receive money derived from energy and water savings. Without this specific authority to receive money, then the money saved would all be sent to the U.S. Treasury as miscellaneous funds.

Prior to the new guidelines, an installation was required to accept a bill of credit; funds now can be credited to an installation's O&M account. The funding is not "fenced" – it does not have to be used for energy conservation contracts. The funding becomes part

of the installation's O&M funding, expiring at the end of the fiscal year. Projects now bring back money to the base.

This is different from energy savings. Energy savings is the difference between what was initially budgeted for a utility bill and what was actually spent. Energy savings are treated differently than rebates and incentives. Energy Savings are "fenced" and "shared". Shared savings means some portion (approximately 50%) of the money goes to Headquarters.

However, guidance is less clear about receiving rebates and incentives from states. Current guidance simply defines what's acceptable as far as receiving money from gas or electric utilities.

This new guidance should allow maximum flexibility to the installation. Rebates and incentives options are increasing by 15-20% a year, so installations should take advantage of this option. Civilian agencies have same authority as the DOD, but there is no clear authority on how or under what conditions to accept of these funds.

To view Ms. White's presentation, please visit: http://www1.eere.energy.gov/femp/pdfs/fupwg_spring09_white_2.pdf

RENEWABLE PROJECT OVERVIEW

Chandra Shah, National Renewable Energy Laboratory (NREL)

Chandra Shah from NREL spoke about federal and utility renewable requirements, Power Purchase Agreements (PPAs), the Western Area Power Administration Federal Renewable Program, UESC and renewables, and participating in utility renewable programs (renewable projects implemented using appropriations).

EPACT 2005 Section 203 states new statutory renewable energy goals:

- 3% of electric energy by 2007
- 5% of electric energy by 2010
- 7.5% of electric energy by 2013

A bonus provision states that renewable use counts double towards this federal goal if it is produced on federal or Native American land and used by a Federal agency. Currently 28 states and Washington, DC have a Renewable Portfolio Standard (RPS).

A customer-sited PPA is when a private entity installs, owns, operates and maintains customer-sited (behind the meter) renewable equipment. The site then purchases electricity through a PPA. The developer is eligible for tax incentives, and there is no agency up-front capital required. A longer PPA contract length is best – at least 10 years, with 20 years being more preferable. Some long term land use agreement

options require the developer to give the federal agency the right of first refusal on purchase of the power at a pre-determined price.

Ms. Shah also spoke about UESC and renewable energy generation. A site can always bundle renewable energy into its efficiency projects. However for bigger renewable energy projects a site may want to explore a hybrid PPA-UESC project. DOD requires ownership of the energy generation at some point in the future, so this may preclude a hybrid project. However civilian agencies do not have this requirement.

When a site uses appropriations for a project, Ms. Shah recommends having an O&M contract, to ensure that the project is producing electricity for the life of the contract. She also recommends pursuing all available incentives (see DSIRE web site at http://www.dsireusa.org/) and selling solar RECs when possible..

To view Ms. Shah's presentation, please visit: http://www1.eere.energy.gov/femp/pdfs/fupwg_spring09_shah.pdf

COMPETITIVE AGREEMENTS THROUGH THE DEFENSE ENERGY SUPPORT CENTER: RENEWABLE INITIATIVES AND POWER PURCHASE AGREEMENTS

Andrea Kincaid, Defense Energy Support Center

Andrea Kincaid is Chief, Installation Energy with the Defense Energy Support Center (DESC), which is the contracting arm of the DOD for energy related procurements. The purpose of the DESC Installation Energy Business Unit is to help federal agencies meet their goals by establishing long term contracts for onsite generation. There are no fees for DESC's services. DOD sites may contact DESC if a site wants to implement a renewable project.

Ms. Kincaid also outlined a Department of Energy pilot project at the Princeton Plasma Physics Lab in New Jersey. Lessons learned included that the terms extending beyond ten years were preferable (under 10 years makes financing more difficult). Alos, all sites do not have "free" land. Lastly, DESC can assist with the purchase of RECs for those in need.

To view Ms. Kincaid's presentation, please visit: http://www1.eere.energy.gov/femp/pdfs/fupwg_spring09_kincaid.pdf

NASA/FPL RENEWABLE PROJECT: SPACE COAST NEXT GENERATION SOLAR ENERGY CENTER

Gene Beck and Mark Hillman, Florida Power & Light

Gene Beck, Corporate Manager, Governmental Accounts and Mark Hillman, Executive Account Manger, both with Florida Power & Light (FPL), spoke on partnership projects between FPL and NASA. FPL is involved in renewable energy projects in 29 states,

with three projects on the drawing board. NASA and FPL have undergone several UESCs in the past.

In 2007, FPL proposed a renewable project to NASA and the Air Force. The area's primary land owners are Kennedy Space Center, Cape Canaveral Air Force Station, and Patrick Air Force Base. In December 2007, after approximately six to eight months of negotiations, FPL and NASA signed a Memorandum of Understanding (MOU) for renewable energy project plans involving land use and facilities development. The parties agreed to a 10 MW photovoltaic pilot project.

The project's output feeds directly into a NASA-owned distribution system. The project will benefit from the RECs from the kWh. FPL will get all of the 110 MW the Florida Public Utility Commission had authorized to recover in 2008.

To view Mr Beck's and Mr. Hillman's presentation, please visit: http://www1.eere.energy.gov/femp/pdfs/fupwg-spring09-beck-hillman.pdf

SPECIAL AFTERNOON SESSION – ENERGY LAWYERS AND CONTRACTING OFFICERS WORKING GROUP: DISCUSSION ON CIVILIAN-SIDE REBATES AND INCENTIVES GUIDANCE DRAFT

Julia Kelley, Oak Ridge National Laboratory

This session was a broad discussion on civilian agency retention of rebates and incentives. The guidance outlines how federal agencies can accept money from utility providers in the form of rebates and incentives. This opinion does not apply to the Air Force (The Air Force cannot allow a third party to pay a government utility bill, according to Karen White's legal opinion). If the proposed legislative to this issue is approved then this will no longer be an issue.

Civilian agencies currently do not have a mechanism in place for implementing rebates and incentive funding. FMR 82-56 and DOD legal opinion are the two existing sources for providing instruction to civilian agencies

A comment was raised by a session attendee regarding if a site can take money from a curtailment service provider (a third party recognized demand response providers). Brian Lally provided a response, by asking "what was the intent of Congress. Did Congress want federal agencies to participate in demand response?" According to fiscal law opinion, Congress wants agencies to take money from trusted and regulated agencies.

David McAndrew suggested separating the document into two parts:

- 1. Accepting rebates and incentives from utilities
- 2. Accepting rebates and incentives from other entities

ENERGY LAWYERS AND CONTRACTING OFFICERS WORKING GROUP: DEVELOPING A MODEL POWER PURCHASE AGREEMENT

Chandra Shah, National Renewable Energy Laboratory

Chandra Shah from the National Renewable Energy Laboratory moderated a discussion on writing a model Power Purchase Agreement.

If a UESC is tied to electricity production it may not be a UESC. Under a UESC, the agency has to take possession of the electricity producing asset. If utility owns the asset then it is best to do a Utility Service Agreement and use a FAR clause, as opposed to a UESC. A Utility Services Agreement involves a contract with the local serving utility for the purchase of electricity from the on-site utility owned and operated renewable generation.

A key is building a renewable project for agency use only. 241-5 allows utilities to build something on site that is not rate-based. The charge is then designated special for the customer.

<u>APPENDIX 1</u> - Meeting Participants List Federal Utility Partnership Working Group Meeting May 5-6, 2009

Utility		
Christopher	Abbuehl	Constellation Energy
David	Banks	Georgia Power
Gene	Beck	Florida Power and Light
Joe	Bosco	Mississippi Power Company
Jeff	Brown	Sandhills Utility Services, LLC
Steve	Buchanan	OG&E Electric Services
David	Burnette	Entergy Arkansas, Inc.
Arlan	Chenault	Mississippi Power Company
Bud	Clark	American Electric Power
Phillip	Consiglio	Southern California Edison
David	Dykes	Georgia Power/Southern Company
David	Erickson	Gulf Power
Roger	Farzaneh	Pacific Gas & Electric Company
Kris	Findley	Mississippi Power
Mike	Fleming	San Diego Gas & Electric
Jennifer	Gary	Entergy
Beck	Gene	Florida Power and Light
Tim	Gravitt	Georgia Power Company
David	Guebert	San Diego Gas and Electric
Paul	Harrison	Mississippi Power Co.
Vince	Heuser	Nolin RECC
Mark	Hillman	Florida Power and Light
Don	Horsley	Mississippi Power Company
Kevin	Johnson	Vectren / ESG
		Georgia Power Company - Energy
Rufus	Kay	Services
Stan	Knobbe	San Diego Gas & Electric
Mark	Loughman	Mississippi Power Company
George	Mank	Washington Gas
Patricia	Melton	Georgia Power Company
Chuck	Miller	WBI Holdings
Angie	Noel	Alabama Power Company
Brent	Patera	Pacific Gas & Electric Company
Greg	Reardon	Alabama Power Company
Stephen	Sherman	Alabama Power Company
Tony	Smith	Mississippi Power

Mark	Tabert	Progress Energy Carolinas
Dale	Tattersall	San Diego Gas & Electric
Oanh	Tran	Washington Gas
Daniel	Tunnicliff	Southern California Edison
Dean	Yobs	AGL Resources, Inc.
Federal Agency		
Richard	Bledsoe	Department of Defense - Army
Diane	Breithaupt	U.S. Coast Guard
Nancy	Coleal	Department of Defense - Air Force
Linda	Collins	U.S. General Services Administration
Doug	Culbreth	DOE-FEMP
Larry	Daughtry	Department of Defense - Army
Elaine	Eder	U.S. Coast Guard
Melissa	Ferguson	NASA SSC
Richard	Fillman	Department of Defense - Air Force
Robert	Ganton	Department of Defense - Army
Robert	Hennessee	US Army Corps of Engineers
Eddie	Hunt	Department of Defense - Marine Corps
Andrea	Kincaid	Defense Energy Support Center
Drexel	Kleber	Department of Defense - Army
Linda	Koman	U.S. General Services Administration
Pamela	Komer	U.S. Coast Guard
Lisa	Maisel	U.S. Department of Veterans Affairs
David	McAndrew	DOE - FEMP
Joshua	Mentink	Department of Defense - Navy
Harold	Merschman	US Army Corps of Engineers
Alfred	Moreau	Department of Defense - Army
Sandy	Morgan	U.S. Department of Agriculture
Robin	Perkins	Department of Defense - Navy
Timothy	Pugh	Department of Defense - Air Force
Yvonne	Riley	Department of Defense - Navy
Matthew	Schultz	Department of Defense - Navy
Robert	Shiyou	Department of Defense - Navy
Randy	Smidt	Department of Defense - Army
Jim	Snook	Department of Defense - Air Force
John	Spiller	Department of Defense - Army
Rick	Stacey	Department of Defense - Air Force
Phyllis	Stange	United States Coast Guard
David	Struck	United States Coast Guard
Edward	Thibodo	Department of Defense - Navy

Marten	Wallace	Defense Energy Support Center
Barry	Wallace	Department of Defense - Army
Karen	White	Department of Defense - Air Force
Thomas	White	Department of Defense - Air Force
Charles	Williams	U.S. Army Corps of Engineers
Michael	Winton	Department of Defense - Air Force
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National Lab	oratory	
Doug	Dixon	Pacific Northwest National Laboratory
Mike	Hightower	Sandia National Laboratory
Julia	Kelley	Oak Ridge National Laboratory
Chandra	Shah	National Renewable Energy Laboratory
Karen	Thomas	National Renewable Energy Laboratory
Mike	Warwick	Pacific Northwest National Laboratory
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Energy Relat	ed	
Miller	Allen	Chevron Energy Solutions
Steve	Allenby	Allenby Associates, LLC
David	Base	Chevron Energy Solutions
Sterling	Bowen	Southern Energy Management, Inc
Ronnie	Brannen	PowerSecure, Inc.
Corey	Bresnahan	United Financial of Illinois
Barbara	Brown	NORESCO
Jason	Cartozian	ConEdison Solutions
Dawn	Dilbeck	Chevron ES
E. W.	Dovel	Harris Lighting
Richard	Eppley	Guggenheim Capital Markets, LLC
Jeff	Esposito	Siemens Building Technologies
Steven	Estomin	Exeter Associates, Inc.
Mark	Falasca	Satcon Technology Corporation
Jesse	Feinberg	Energetics Inc.
Mel	Fernandez	Honeywell Building Solutions
Peter	Flynn	Bostonia Partners LLC
Ralph	Focht	Johnson Controls, Inc.
Scott	Foster	Hannon Armstrong
Scott	Gordon	Schneider Electric
Ron	Gray	Xenergy, Inc.
Bruce	Gross	Dominion Federal
Katherine	Hamilton	GridWise Alliance
Rick	Heath	Hannon Armstrong
Jay	Johnson	Chevron Energy Solutions

Richard	Kaelin	Federal Business Group
Mark	Krog	Siemens
Steve	Kueppers	United Financial of Illinois
Steve	Levy	Satcon
David	Lisenbee	PowerSecure
Jesse	Maestas	URS
Frank	Napoli	Con Edison Solutions
Alan	O'Quinn	PowerSecure, Inc.
Spencer	O'Quinn	Chevron Energy Solutions
Matthew	Ossi	Chevron Energy Solutions
Scott	Pogue	Agrisa Bioenergy
Frank	Pucciano	Global Energy Systems
Thomas	Riney	SEI Group, Inc.
Kathy	Robb	Global Energy Systems
Bryan	Ryscavage	First Security Leasing
Natasha	Shah	Siemens Building Technologies, Inc.
Robert	Somers II	2rw Consultants, Inc.
Bill	Stein	Siemens
William	Stermer	Energy Systems Group
Jeff	Stott	Guggenheim Capital
Dennis	Svalstad	WBI Holdings
David	Teetz	Bridge Technologies
Donald	Thompson	Jacobs FOSC
Bice	Tracy	Siemens
Kevin	Vaugn	TAC
Francis	Wheeler	Water Management, Inc.
Billy	Wise	EMC Engineers, Inc.